BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: IMPROVEMENTS TO ROADS AND DRAINS AT SNEHANAGARA, IN WARD NO 07 - BYATARAYANAPURA, KODIGEHALLI SUB DIVISION.

CONSULTANT:

BVH CONSULTING ENGINEERS

41/2, 6TH MAIN ROAD JNANAJYOTHI NAGAR,
MALATHALLI, BANGALORE-560056
PHONE : 9964339888, LANDLINE:08023241948
EMAIL :mbnk2278@yahoo.com

Bruhat Bangalore Mahanagara Palike

BYTARAYANAPURA DIVISION

Job No: 007-16-000043 26618

Name of Agency :- Benaka Developers and projects Pvt. Ltd

Bill No :- 1st Part Bill

Name of work: Improvements to Roads and drains at Sneha nagara, in ward No 07 - Byatarayanapura, Kodigehalli Sub Division.

Sl No	Description of Work	Unit	No.	L	B	D	Qty	Rate	Amount
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Measurements recorded on:								
	Desilt	Cum							
	1st Cross Road								
	0-30		2	30.00	0.45	0.60	16.20		
	30-60		2	30.00	0.45	0.60	16.20		
	60-90		2	30.00	0.45	0.60	16.20		
	90-121		2	31.00	0.45	0.60	16.74		
	2nd Cross Road								
	0-30		2	30.00	0.45	0.60	16.20		
	30-60		2	30.00	0.45	0.60	16.20		
	60-90		2	30.00	0.45	0.60	16.20		
	90-128		2	38.00	0.45	0.50	17.10		
	Cross Road connecting 2nd cross (C.C)								
	0-30		1	30.00	0.45	0.60	8.10		
	30-60		1	30.00	0.45	0.60	8.10		
	60-86		1	26.00	0.45	0.60	7.02		
	Cross Road (Asphalt)								
	0-30		2	30.00	0.45	0.60	16.20		
	30-60		2	30.00	0.45	0.60	16.20		
	60-88		2	28.00	0.45	0.60	15.12		
	Culverts		1	6.00	1.60	1.20	11.52		
	over burden earth		1	29.00	2.00	0.40	23.20		
	At main road		1	22.00	2.80	0.55	33.88		
	At cross road		1	26.00	1.50	0.40	15.60		
					Total Qty Cum		**285.98**	**196.00**	**56052.08**
2	Removing & Refixing Stone slabs of drains and Pointing in C.M(1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)								
	Measurements recorded on:								
	BS Slab Drain	Sqm							
	1st Cross Road at bottom		1	30.00	0.40		12.00		
	sides		2	30.00	0.50		30.00		
	1st Cross Road at bottom		1	30.00	0.40		12.00		
	sides		2	30.00	0.50		30.00		
	1st Cross Road at bottom		1	30.00	0.40		12.00		
	sides		2	30.00	0.50		30.00		
	1st Cross Road at bottom		1	31.00	0.40		12.40		
	sides		2	31.00	0.50		31.00		
	2nd Cross Road bottom		1	30.00	0.40		12.00		
	sides		2	30.00	0.50		30.00		
	2nd Cross Road bottom		1	30.00	0.40		12.00		
	sides		2	30.00	0.50		30.00		

B.V.H. Consulting Engineers Bangalore

Page 1 of 8

Assistant Executive Engineer

Sl No	Description of Work	Unit	No.	L	B	D	Qty	Rate	Amount
	2nd Cross Road bottom		1	30.00	0.40		12.00		
	sides		2	30.00	0.50		30.00		
	2nd Cross Road bottom		1	38.00	0.40		15.20		
	sides		2	38.00	0.50		38.00		
	Cross Road connecting 2nd cross at bottom		1	22.00	0.40		8.80		
	sides		2	22.00	0.50		22.00		
	at bottom		1	12.00	0.40		4.80		
	sides		2	12.00	0.50		12.00		
					Total Qty Sqm		396.20	85.00	33677.00
3	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 10cms thick (P.No.25, I.No.5.31.2 of PW, P&IWTD SR 2016-17)								
	BS cover Slab 2nd cross		1.00	6.50	1.20		7.80		
			1.00	12.30	1.20		14.76		
	2nd cross		1.00	1.50	0.90		1.35		
					Total Qty Sqm		23.91	867.00	20729.97
4	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
	BS Slab Drain 1st cross LHS bottom		1.00	58.00	0.40		23.20		
	sides		2.00	58.00	0.45		52.20		
					Total Qty Sqm		75.40	699.00	52704.60
5	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)								
	Measurements recorded on:								
	Culverts		1	5.70	0.60	0.15	0.51		
	Cross Road connecting 2nd cross CC Road		1	30.00	4.50	0.15	20.25		
			1	30.00	4.50	0.15	20.25		
			1	26.00	4.50	0.15	17.55		
					Total Qty Cum		58.56	5613.00	328714.12
6	KSRB 5-14: providing and constructing load bearing wall with solid concrete blocks having block density not less than 1800 kg/m3 of size solid block 400x150x200mm having a minimum average compressive strength of 4.00 N/mm2 confirming to IS 2185(Part 1):2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. KBS No. 5.4 (P.No.24, I.No.5.26.2 of PW, P&IWTD SR 2016-17)								
	Measurements recorded on:								

B.V.H. Consulting Engineers Bangalore

AE(Civil) 18/12/17

P 13

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Palike

Sl No	Description of Work	Unit	No.	L	B	D	Qty	Rate	Amount
	For Flagging/Raising	Sqm							
	1st Cross Road		2	30.00		0.40	24.00		
	2nd Cross Road		2	30.00		0.40	24.00		
	Cross Road connecting 2nd cross		2	30.00		0.40	24.00		
					TOTAL QTY Sqm		72.00	1009.00	72648.00
7	KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortor 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materaials, labour, curing complete as per specifications. Specifcation No. KBS 5.1.13. (P.No.23, I.No.5.6 of PW, P&IWTD S.R 2015-16)								
	Measurements recorded on:								
	Culvert		2	5.7	0.60	0.90	6.16		
					Total Qty Cum		6.16	4657.00	28668.492
8	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.112, I.No.15.1 of PW, P&IWTD S.R 2015-16) .								
	Measurements recorded on:								
	Culverts		2	5.7		0.90	10.26		
		Sqm			TOTAL QTY Sqm		10.26	108.00	1108.08
9	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWTD S.R 2016-17)								
	Measurements recorded on:								
	Coping on Flagging coarse	Cum							
	2nd cross		2	30.00	0.15	0.10	0.90		
	2nd cross		2	30.00	0.15	0.10	0.90		
	2nd cross		2	30.00	0.15	0.10	0.90		
	2nd cross		2	30.00	0.15	0.10	0.90		
	1st cross		2	30.00	0.15	0.10	0.90		
	1st cross		2	30.00	0.15	0.10	0.90		
	1st cross		2	30.00	0.15	0.10	0.90		
	1st cross		2	30.00	0.15	0.10	0.90		
	Culverts		2	5.70	0.60	0.10	0.68		
					TOTAL QTY Cum		7.88	6052.00	47713.97
10	Providing and fixing RCC Precast cover slab of 100mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge.								
		Sqm							
	1st cross LHS		1	19.00	0.90		17.10		
	1st cross LHS		1	41.00	0.90		36.90		
	1st cross RHS		1	35.00	0.90		31.50		
	Missing slabs in 2nd cross RHS		1	33.00	0.90		29.70		
	LHS		1	13.00	0.90		11.70		
	LHS		1	8.80	0.90		7.92		
	LHS		1	32.00	0.90		28.80		

B.V.H. Consulting Engineers Bangalore

Applly N.D
AE(W7)
20/12/17

p:14

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Palike
Bangalore - 560 092

Sl No	Description of Work	Unit	No.	L	B	D	Qty	Rate	Amount
	Cross road connecting 2nd cross LHS		1	20.00	0.90		18.00		
	LHS		1	13.00	0.90		11.70		
	RHS		1	27.00	0.90		24.30		
			.		TOTAL QTY Sqm		217.62	1907.00	415001.34
11 28	Providing and fixing Pre cast solid concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete (P.No.25, I.No.5.30 of PW,P&IWTD S.R 2016-17)								
	2nd Cross Road								
	LHS 0-32		1	32.00		/0.45	71		
	RHS		1	30.00		/0.45	67		
	RHS		1	30.00		/0.45	67		
	RHS		1	30.00		/0.45	67		
	RHS		1	17.00		/0.45	38		
		No.			TOTAL QTY		308.89	348.00	107493.33
12 29	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (P.No.182, I.No. 24.1 of PW,P&IWTD SR 2016-17)								
	For Kerb Painting	Sqm							
	2nd Cross Road								
	LHS 0-32		1	32.00		0.35	11		
	RHS		1	30.00		0.35	11		
	RHS		1	30.00		0.35	11		
	RHS		1	30.00		0.35	11		
	RHS		1	17.00		0.35	6		
					TOTAL QTY Sqm		48.65	67.00	3259.55
13 14	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge								
	Culvert Slab		9	1.80	0.60		9.72		
					TOTAL QTY Sqm		9.72	5580.00	54237.60
14 17	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTD S.R 2016-17)								
	Measurements recorded on:								
	Road Portion	Cum							
	1st Cross Road Restoration								
	0-30		1	30.00	2.30	0.25	17.25		
	30-60		1	30.00	2.45	0.25	18.38		
	60-90		1	30.00	2.50	0.25	18.75		
	90-121		1	31.00	2.20	0.25	17.05		
	2nd Cross Road-BWSSB roadcut portion restoration								
	0-30		1	30.00	2.00	0.25	15.00		
	30-60		1	30.00	2.20	0.30	19.80		
	60-90		1	30.00	2.40	0.30	21.60		
	90-128		1	38.00	2.50	0.30	28.50		

B.V.H. Consulting Engineers Bangalore

Agt pl. N.D AE(WT) 23/12/17 P:15

Assistant Executive Engineer Kodigehalli Division Bruhat Bangalore Mahanagara Palike 23/12/17

Sl No	Description of Work	Unit	No.	L	B	D	Qty	Rate	Amount
	Cross Road connecting 2nd cross (C.C)								
	0-30		1	30.00	(4.9+4.2)/2	0.25	34.13		
	30-60		1	30.00	(4.2+4.4)/2	0.25	32.25		
	60-86		1	26.00	(4.4+4.55)/2	0.25	29.12		
	Cross Road (Asphalt)								
	0-30		1	30.00	(4.4+3.1)/2	0.25	28.13		
	30-60		1	30.00	(3.1+4.8)/2	0.25	29.63		
	60-88		1	28.00	(4.8+4.25)/2	0.25	31.71		
					TOTAL QTY Cum		**341.28**	**156.00**	**53239.68**
15 20	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechaniqal mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWTD SR 2016-17)								
	Measurements recorded on:								
	Wet Mix Macadam	**Cum**							
	1st Cross Road Restoration								
	0-30		1	30.00	2.30	0.25	12.08		
	30-60		1	30.00	2.45	0.25	12.86		
	60-90		1	30.00	2.50	0.25	13.13		
	90-121		1	31.00	2.20	0.25	11.94		
	2nd Cross Road-BWSSB								
	0-30		1	30.00	2.00	0.25	10.50		
	30-60		1	30.00	2.20	0.25	11.55		
	60-90		1	30.00	2.40	0.25	12.60		
	90-128		1	38.00	2.50	0.25	16.63		
	Cross Road (Asphalt)								
	0-30		1	30.00	(4.4+3.1)/2	0.25	28.13		
	30-60		1	30.00	(3.1+4.8)/2	0.25	29.63		
	60-88		1	28.00	(4.8+4.25)/2	0.25	31.71		
					TOTAL QTY Cum		**190.73**	**1855.00**	**353808.79**
16 21	KSRRB M500-6. Providing and applying **primer coat with S.S. bitumen emulsion on prepared surface of granular base** such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kg /sqm using mechanical means complete as per specifications.As per MORTH Specification No. 502 with all lead and lift loading and unloading and all other incidential charges etc.complete as per specification and direction of the engineer-in-charge of the work								
	Measurements recorded on:								
	Prime Coat	**Sqm**							
	1st Cross Road								
	0-30		1	30.00	2.30		69.00		
	30-60		1	30.00	2.45		73.50		
	60-90		1	30.00	2.50		75.00		
	90-121		1	31.00	2.20		68.20		
	2nd Cross Road								
	0-30		1	30.00	2.00		60.00		
	30-60		1	30.00	2.20		66.00		
	60-90		1	30.00	2.40		72.00		
	90-128		1	38.00	2.50		95.00		
	Cross Road (Asphalt)								

Apply. N.D AE(W) 01/01/18

Apply. N.D AE(W) 08/01/18

B.V.H. Consulting Engineers Bangalore

Apply. N.D AE(W)

P 16

Assistant Executive Engineer Kodigehalli Sub Division

Sl No	Description of Work	Unit	No.	L	B	D	Qty	Rate	Amount
	0-30		1	30.00	(4.4+3.1)/2		112.50		
	30-60		1	30.00	(3.1+4.8)/2		118.50		
	60-88		1	28.00	(4.8+4.25)/2		126.84		
					Total Qty Sqm		936.54	31.00	29032.74
17 23	KSRRB 500-7. Providing and applying **tack coat using 80/100 grade bitumen**(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH Chapter 5 with all lead and lift loading and unloading and all other incidential charges etc.complete as per specification and direction of the engineer-in-charge of the work								
	Measurement recorded on:								
	For DBM								
	1st Cross Road								
	0-30		1	30.00	2.30		183.00		
	30-60		1	30.00	2.45		171.90		
	60-90		1	30.00	2.50		164.40		
	90-121		1	31.00	2.20		190.65		
	2nd Cross Road								
	0-30		1	30.00	2.00		184.50		
	30-60		1	30.00	2.20		189.00		
	60-90		1	30.00	2.40		180.90		
	90-128		1	38.00	2.50		232.94		
	For BC								
	1st Cross Road								
	0-30		1	30.00	(6.2+6)/2		183.00		
	30-60		1	30.00	(6+5.45)/2		171.90		
	60-90		1	30.00	(5.45+5.5)/2		164.40		
	90-121		1	31.00	(5.5+6.8)/2		190.65		
	2nd Cross Road								
	0-30		1	30.00	(6.1+6.2)/2		184.50		
	30-60		1	30.00	(6.2+6.25)/2		189.00		
	60-90		1	30.00	(6.25+5.8)/2		180.90		
	90-128		1	38.00	(5.8+6.45)/2		232.94		
	Cross Road (Asphalt)								
	0-30		1	30.00	(4.4+3.1)/2		112.50		
	30-60		1	30.00	(3.1+4.8)/2		118.50		
	60-88		1	28.00	(4.8+4.25)/2		126.84		
					Total Qty Sqm		3352.42	13.00	43581.46

B.V.H. Consulting Engineers Bangalore

Applied
AE(W7)
22/01/18

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Palike
Bangalore - 560 092

Sl No	Description of Work	Unit	No.	L	B	D	Qty	Rate	Amount
18	KSRRB M500-16. Providing and laying dense bituminous macadam 50-75mm compacted thickness with 4.5% VG-30 Bitumen using 40/60 TPH capacity H.M.P, using crushed aggregates of grading II, premixed with VG 30 grade bituminous binder and transporting the hot mix to work site, laying with mechanical paver to the required grade level and alignment rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10, complete in all respects complete as per specification MORTH specification No. 507 (P.No.162 I.No. 21.17.6 of PW,P&IWTD S.R 2016-17)								
	For Laying DBM	**Cum**							
24	**1st Cross Road Restoration**								
			1	19.00	2.45	0.05	2.33		
			1	12.00	2.70	0.05	1.62		
			1	16.00	3.00	0.05	2.40		
			1	20.00	2.60	0.05	2.60		
			1	13.00	2.50	0.05	1.63		
			1	26.00	2.30	0.05	2.99		
	2nd Cross Road-BWSSB								
			1	24.00	2.40	0.05	2.88		
			1	19.00	2.35	0.05	2.23		
			1	21.00	2.40	0.05	2.52		
			1	23.00	2.80	0.05	3.22		
			1	18.00	3.10	0.05	2.79		
					Total Qty Cum		**27.21**	**7384.00**	**200881.72**
19 25	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)								
	Measurement recorded on:								
	Bituminous Concrete	**Cum**							
	1st Cross Road								
	0-30		1	30.00	(6.2+6)/2	0.04	7.32		
	30-60		1	30.00	(6+5.0)/2	0.04	6.60		
	60-90		1	30.00	(5.2+5.5)/2	0.04	6.42		
	90-121		1	31.00	(5.5+6.2)/2	0.04	7.25		
	2nd Cross Road								
	0-30		1	30.00	(6.1+6.2)/2	0.04	7.38		
	30-60		1	30.00	(6.2+6.25)/2	0.04	7.48		
	60-90		1	30.00	(6.25+5.5)/2	0.04	7.06		
	90-128		1	38.00	(5.8+6.1)/2	0.04	9.04		
	Cross Road (Asphalt)								
	0-30		1	30.00	(4.4+3.1)/2	0.04	4.50		
	30-60		1	30.00	(3.1+4.5)/2	0.04	4.56		
	60-88		1	28.00	(4.5+4.25)/2	0.04	4.91		
					Total Qty Cum		**72.52**	**8438.00**	**611886.6328**
20 30	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-17)								
	Measurement recorded on:								
	Edge line	**Sqm**							

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Palike

Sl No	Description of Work	Unit	No.	L	B	D	Qty	Rate	Amount
	1st Cross Road								
	0-30		2	30.00	0.10		6.00		
	30-60		2	30.00	0.10		6.00		
	60-90		2	30.00	0.10		6.00		
	90-121		2	31.00	0.10		6.20		
	2nd Cross Road								
	0-30		2	30.00	0.10		6.00		
	30-60		2	30.00	0.10		6.00		
	60-90		2	30.00	0.10		6.00		
	90-128		2	38.00	0.10		7.60		
	Cross Road (Asphalt)								
	0-30		2	30.00	0.10		6.00		
	30-60		2	30.00	0.10		6.00		
	60-88		2	28.00	0.10		5.60		
	Centre line		49	3.00	0.10		14.70		
					Total Qty Sqm		**82.10**	**570.00**	**46797**
20	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) ((P.No.177, I.No.22.6.1 of PW,P&IWTD SR 2016-17)								
	Measurement recorded on:								
	Cross Road connecting 2nd cross CC road								
	0-30		1	30.00	(4.9+4.2)/2	0.15	20.48		
	30-60		1	30.00	(4.2+4.4)/2	0.15	19.35		
	60-86		1	26.00	(4.4+4.55)/2	0.15	17.47		
					Total Qty Cum		**57.30**	**6525.00**	**373862.93**
21	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.(P.No.177, I.No.22.7 of PW, P&IWTD SR 2016-17)								
	Measurement recorded on:								
	Road Portion	**Sqm**							
	Cross Road connecting 2nd cross (C.C)								
	0-30		1	30.00	(4.9+4.2)/2		136.50		
	30-60		1	30.00	(4.2+4.4)/2		129.00		
	60-86		1	26.00	(4.4+4.55)/2		116.48		
					Total Qty Sqm		**381.98**	**100.00**	**38198.00**
					Total Construction Cost				**2973297.08**

B.V.H. Consulting Engineers Bangalore

P:19

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Palike
Bangalore - 560 092

Improvements to roads and drains at Snehanagara, in ward no.07 Byatarayanapura.,

B.H. Consulting Engineers Bangalore

Asphalt N.D

AE(Civil)

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Palike
Bangalore - 560 092